

# Notice of Allowability

Application No.

09/828,556

Examiner

Courtney D. Fields

Applicant(s)

MAURO ET AL.

Art Unit

2137

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 24 April 2007.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1,7,12, and 15 have been amended.
2. Claims 1-20 are pending.

### ***Response to Arguments***

3. Applicant's arguments filed 24 April 2007 have been fully considered and they are persuasive.

### ***Allowable Subject Matter***

4. **Claims 1-20 are allowed.**
5. The following is an examiner's statement of reasons for allowance: The present invention is directed to a method and system that helps to accelerate the complex encryption and authentication algorithms within security protocols by partitioning the cryptographic layers and distributing them to a high performance processor, such as a digital signal processor. Each independent claim identifies the uniquely distinct features **"having a multi-layer that may be partitioned into more complex layers and less complex layers wherein a high performance processor configured to process voice data when the high performance processor is operating a voice service option configured to operate one of the more complex layers of the multi-layer protocol and when the high performance processor is not operating the voice service option configured to provide a result of the operation of one of the more complex layers to the first processor"**.

The closest prior art, Boneh et al. (Pub No. 2002/0112167) disclose a method and apparatus for protecting sensitive information within server or other computing

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environments. Numerous electronic requests addressed to a server system are received over network couplings and evaluated. The evaluation scans for sensitive information including credit card information and private user information. Upon detecting sensitive data, cryptographic operations are applied to the sensitive data. When the sensitive data is being transferred to the server system, the cryptographic operations encrypt the sensitive data prior to transfer among components of the server system. When sensitive data is being transferred from the server system, the cryptographic operations decrypt the sensitive data prior to transfer among the network couplings. The cryptographic operations also include hash, and keyed hash operations, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

The closest prior art, Jones et al. (US Patent No. 6,088,800) discloses an encryption chip is programmable to process a variety of secret key and public key encryption algorithms. The chip includes a pipeline of processing elements, each of which can process a round within a secret key algorithm. Data is transferred between the processing elements through dual port memories. A central processing unit allows for processing of very wide data words from global memory in single cycle operations. An adder circuit is simplified by using plural relatively small adder circuits with sums and carries looped back in plural cycles. Multiplier circuitry can be shared between the processing elements and the central processor by adapting the smaller processing element multipliers for concatenation as a very wide central processor multiplier, either

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singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

The closest prior art, King (US Patent No. 6,212,576) discloses a GSM transceiver for use in a GSM network is disclosed. The transceiver includes a multilayer protocol stack for executing a plurality of asynchronous tasks which are encoded with a universal and generic instruction set used for communicating between and synchronizing the tasks; a multitasking operating system having a set of operating system instructions and providing prioritized execution of the tasks by execution of the operating system instructions; an operating system interface causing instructions of the universal instruction set to be carried out by the multitasking operating system so that each universal instruction of the universal instruction set is executed as a sequence of at least one instruction of the operating system instruction set; and at least one processor controlled by the operating system to execute the asynchronous tasks, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

6. Therefore, **claims 1,7,12, and 15** and the respective **dependent claims 2-6,8-11,13-14, and 16-20** are in condition for allowance.

### ***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney D. Fields whose telephone number is 571-272-3871. The examiner can normally be reached on Mon - Thurs. 6:00 - 4:00 pm; off every Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



cdf

July 16, 2007

  
**MATTHEW SMITHERS**  
**PRIMARY EXAMINER**  
*Art Unit 2137*